EC-2000-007



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## **VIA AIRBORNE EXPRESS**

February 25, 2002

United States Environmental Protection Agency
Enforcement and Compliance Docket and Information Center
Mail Code 220 1A

Attn: Docket Number EC-2000-007
1200 Pennsylvania Avenue NW

Washington, DC 20460

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Dear Sirs and Madams:

Re: Comments on the Proposed Establishment of Electronic Reporting;

Electronic Records Rule - 66FR46162-46195

United States Steel Corporation ("U. S. Steel") is a company directly affected by these proposed rules. We have reviewed them and have the following comments. I am enclosing an original and three copies of this letter.

## **Summary**

- U. S. Steel opposes the proposed rule in its current form. Software required to meet the requirements of the proposed rule is not currently available. Hundreds of computer systems would have to be replaced and/or reprogrammed to achieve compliance. This process would be extremely disruptive and costly. The cost would clearly outweigh any perceived benefit.
- U. S. Steel does not have any computer systems installed that meet the proposed EPA rule. Many of the older systems used to record data to meet environmental reporting requirements are not capable of running the type of recordkeeping software needed to comply with the proposed rule all those computers as well as the software used on those computers would have to be replaced, and then additional software purchased. A significant amount of custom programming services would have to be purchased to design, code, test and install functions not commercially available.
- U. S. Steel would incur software costs for licensing, technical support and product upgrades. In addition, there would be costs for acquiring additional computers, hardware maintenance agreements and their associated operating systems and utility software licenses and technical support agreements. There would also be significant costs for contract services to install and integrate the new hardware and software systems.

Since the EPA has not completed the specifications for its electronic document receiving system, some requirements for the industry systems remain unknown. This is particularly true for the validation of electronic signatures.



## Comments on Specific Requirements

1. Electronic records must not allow alteration without detection.

Digital signature technology is available for current computers and current operating systems to identify when protected data is changed. However, these products are designed to prevent an unauthorized party from compromising the protected data; a knowledgeable employee could alter and replace the data without detection. To prevent the latter, U. S. Steel would have to implement sophisticated audit trail software. We are aware of the existence of any such product.

2. We must assure electronic records are not altered throughout the record retention period.

Suitable electronic recordkeeping systems are available, but U. S. Steel has not acquired one. Vendors of these systems recommend that a digital signature product be acquired and integrated into the recordkeeping system to provide the type of protection required by the proposed EPA rule. Historically, these protection mechanisms have weakened over time as ever-faster processors make it easier to solve hashing mechanisms or encryption keys.

3. Records must be in a form that can be readily copied and readable throughout the retention period.

Current electronic recordkeeping systems provide this function.

4. Where records require signature, the document must contain an electronic signature as well as the name of signatory, date, time of signature and meaning associated with the signature (e.g. review, approve, responsibility, authorship, etc.).

With the exception of the "meaning associated with the signature", standard products provide all the required functions. We believe that software vendors could write custom code to add the missing function. EPA would have to provide a more detailed specification.

5. The electronic signature would need to be protected so it cannot be detached, copied or compromised.

Current digital signature technology provides this security.

6. Electronic documents would need to have secure, computer generated, timestamped audit trails to automatically record the date and time of any action that would create, modify or delete any records. This audit trail would need to exist for the life of the record and be readily accessible for agency review.

We are not aware of any audit trail software available today that would allow industry to conform to the proposed rule for processing of the electronic record prior to its being entered into an electronic recordkeeping system.

7. Electronic records would need to be searchable and retrievable for inspections, audits, legal proceedings, and third party disclosures throughout the record retention period.

The electronic recordkeeping systems can satisfy these requirements.

8. Electronic records must be archived in a form that preserves the context, metadata and audit trail.

With the exception of the "context" and metadata, standard products provide all the required functions. We believe that the software vendors could write custom codes to add the missing function. Again, the EPA must elaborate on this specification.

- 9. Electronic records, as well as hardware and software utilized by computers to create the records, must be readily available for agency inspection.
  - If by "software", the EPA requires the availability of the electronic recordkeeping system's source code, then special arrangements would have to be made with the software vendor. They do not provide the source code of their proprietary products. Otherwise, the ability to make the electronic records available for inspection is standard within electronic recordkeeping systems.
- 10. Electronic signatures must be linked to the record in a manner that it cannot be detached, copied, transferred or otherwise compromised. Must ensure signatures cannot be falsified.

Digital signature products provide this function. The rule is not clear as to what extent industry will have to go to ensure that signatures cannot be falsified. For instance, biometric devices are an example of an extreme measure.

11. The electronic signature information must be subject to the same controls as the electronic records listed above and be included as a part of a readable form of the record.

As stated above, vendors of the electronic recordkeeping systems recommend that a digital signature product be acquired and integrated into the recordkeeping system to provide the controls required by the proposed EPA rule.

Very truly yourş

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